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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

9

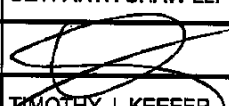
Application Number	10/523,582
Filing Date	11/15/2005
First Named Inventor	Mark DENFORD
Art Unit	3629
Examiner Name	N/A
Attorney Docket Number	37388-404500

**ENCLOSURES (Check all that apply)**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement and PTO/SB/08A form<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>1) Copy of PCT International Search Report; and,<br>2) Copy of publications and foreign patents |
|--|--|--|

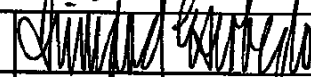
Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	SEYFARTH SHAW LLP		
Signature			
Printed name	TIMOTHY J. KEEFER		
Date	4/28/06	Reg. No.	35,567

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being electronically transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	TRINIDAD ESCOBEDO	Date	4/28/06

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Denford et al

Examiner: n/a

Serial No.: 10/523,582

Art Unit: 3629

Filed: November 15, 2005

For: **METHOD AND APPARATUS FOR THE ANALYSIS OF COMPLEX SYSTEMS**

**Mail Stop Amendment**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

## **INFORMATION DISCLOSURE STATEMENT**

Sir:

With regard to the above-identified application, pursuant to 37 C.F.R. §1.56, 1.97 and 1.98, the items of information listed on the enclosed Form PTO/SB/08A is brought to the attention of the Examiner.

This Information Disclosure Statement, as far as is known to the undersigned, is filed before the mailing date of a first Office Action on the merits. The undersigned certifies that several items of information contained in the information disclosure statement was cited during prosecution of the corresponding International Patent Application PCT/AU03/00979. The relevance of the references are as indicated in the attached PCT International Search Report.

Applicants submit herewith other patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

A list of the patent(s) or publication(s) is set forth on the attached Form PTO/SB/08A. In accordance with 37 C.F.R. §1.98(2)(i), a copy of each patent listed on Form PTO/SB/08A is enclosed herewith.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such. The filing of this Information Disclosure Statement shall not be construed to

mean that a search has been made or that no other material information as defined in 37 CFR § 1.56(a) exists.

Pursuant to the provisions of MPEP 609, it is requested that the Examiner return a copy of the attached Form PTO/SB/08A, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

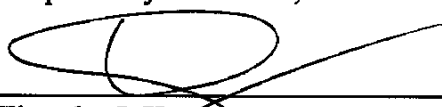
Applicant believes no fees are required with this submission. However, the Commissioner is hereby authorized to charge any deficiency deemed necessary to Deposit Account No. 19-1351.

Date:

4/28/06

Respectfully submitted,

By:

  
\_\_\_\_\_  
Timothy J. Keefer  
Reg. No. 35,567  
Attorney for Applicant

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00979

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 91/17494 A1 (BACHMAN INFORMATION SYSTEMS), 14 November 1991 the whole document	1, 35, 66, 72
X	WO 98/53399 A2 (BRITISH TELECOMMUNICATIONS PLC), 26 November 1998 the whole document	1, 35, 66, 72
X	US 5,276,877 A (FRIEDRICH et al), 4 January 1994 the whole document	1, 35, 66, 72

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00979

### Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

#### Continuation of Box No: II

The international application does not comply with the requirements of unity of invention, because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion, the International Searching Authority has found that there are three inventions:

1. Independent claims 1, 35, 66 and 72, and claims appended thereto. These claims are directed to methods and an apparatus for analysing systems. It is considered that the evaluation of a system's architecture in terms of non-functional requirements constitutes a first "special technical feature."
2. Independent claim 29, and claims appended thereto, directed to an architectural model of a complex system. In this claim, the only feature which can be identified as a "special technical feature" is the use of Components and Connections in the architectural model.
3. Independent claim 33, and claims appended thereto, directed to a means for obtaining architectural information about a system. The use of an interface enabling the input of architectural information is considered to be a third "special technical feature."

The above groups of claims do share the concept of an architectural model of a system, however this feature is generic and cannot be considered to constitute a "special technical feature." Since no other feature is common to all the claims, they lack unity, *à priori*.

Please note that there are inconsistencies in the dependencies of the claims. (Some examples include: claims 11, 36, 37, which are appended to themselves; claims 67 and 68, each of which is appended to the other; and apparatus claim 28, which is appended to claim 29 for an architectural model. It appears that the numbering of the claims has been befuddled.) As a result, it has only been possible to list the independent claims which correspond to different inventions.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00979

### Box I Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos :  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos :  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

### Box II Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
Independent claims 1, 35, 66 and 72, and claims appended thereto.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/00979

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
US	2002049573	AU	8690701	CA	2419153	EP	1314106
		WO	0219148	US	6311144	US	6560569
US	6311144	AU	8690701	CA	2419153	EP	1314106
		US	2002049573	WO	0219148	US	6560569
WO	9117494	CA	2081546	EP	0531319	US	5146591
		US	5179698	US	5193182	US	5193183
		US	5195178	US	5212771	US	5241645
		US	5249300				
WO	9853399	AU	7346698	EP	0983547		
US	5276877	CA	2047573	DE	4134419	FR	2668271
		GB	2250111	JP	4299414		
END OF ANNEX							

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU03/00979

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
Int. CL. <sup>7</sup> : G06F 17/60, 17/50		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) USPTO, DWPI (IPC: G06F, information system, computer system, architecture, performance, model, business, etc.)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/0049573 A1 (ABU EL ATA), 25 April 2002 the whole document	1, 35, 66, 72
X	<i>Item3 Invests to Commercialise ABACUS</i> (Avolution Press Release), 13 February 2002 <a href="http://www.avolution.com.au/about/media/detailed/main/releases/item_3_invest.htm">http://www.avolution.com.au/about/media/detailed/main/releases/item_3_invest.htm</a> section entitled "The ABACUS Product Suite"	1, 35, 66, 72
X	US 6,311,144 B1 (ABU EL ATA), 30 October 2001 the whole document	1, 35, 66, 72
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"B" earlier application or patent but published on or after the international filing date</p> <p>"E" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>		
Date of the actual completion of the international search 19 August 2003		Date of mailing of the international search report 13 OCT 2003
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: <a href="mailto:pat@ipaaustralia.gov.au">pat@ipaaustralia.gov.au</a> Facsimile No. (02) 6285 3929		Authorized officer  M. D. HOLLINGWORTH Telephone No: (02) 6283 2024





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Substitute for form 1449/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	10/523,582
				Filing Date	11/15/2005
				First Named Inventor	Mark DENFORD
				Group Art Unit	3629
				Examiner Name	n/a
Sheet	1	of	1	Attorney Docket Number	37388-404500

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A1	US-2002/0049573A1	04-25-2002	Abu El Ata	
	A2	US-6311144B1	10-30-2001	Abu El Ata	
	A3	US-5276877A	01-04-1994	Friedrich et al	
	A4	US-			
	A5	US-			
	A6	US-			
	A7	US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>5</sub>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	B1	WO91/17494A1	11-14-1991	Bachman Information Systems		
	B2	WO98/53399A2	11-26-1998	British Telecommunications Plc		
	B3					
	B4					
	B5					
	B6					

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sub>2</sub>
	C1	Item3 Invests to Commercialise ABACUS (Avolution Press Release), 13 Feb 2002 <a href="http://www.avolution.com.au/about/media/detailed/main/releases/item_3_invest.htm">http://www.avolution.com.au/about/media/detailed/main/releases/item_3_invest.htm</a> section entitled "The ABACUS Product Suite"	
	C2	Denford M., O'Neill T., Leaney, J. "Architecture-based Visualisation of Computer Based Systems," Proceedings of the 15 <sup>th</sup> IEEE International Conference and Workshop on Engineering of Computer Based Systems, Lund, Sweden, April 2002.	
	C3	O'Neill, T., Leaney, J., Martyn, P. "Architecture-based performance analysis of the COLLINS class submarine Open System Extension (COSE) Concept Demonstrator (CD)", Proceedings of the 13 <sup>th</sup> IEEE International Conference and Workshop on Engineering of Computer Based Systems, Edinburgh, Scotland, 2000.	

Examiner Signature	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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